

due. However, if such should be required, please charge this fee to Deposit Account No. 03-2468.

Applicants believe this reference to be the closest prior art, and claims 26 and 36 have been amended by incorporating therein the subject matter of claims 31-33 and 48, respectively, in an effort to distinguish more clearly over this teaching. In this respect, it is noted that an obvious translation error has been corrected in amended claim 26 and a corresponding passage of the description. The German word "Quittierung" was erroneously translated as --cancelling-- when, in fact, it means --accepting-- or --acknowledging--, as is obvious from the entire context of the disclosure and particularly from the advantage indicated in the corrected paragraph of the specification.

U. S. patent No. 5,488,277, held to anticipate the claims under 35 U.S.C. 102(b), is not believed to be pertinent to the claimed invention.

Kretschmann '464 describes a human/machine interface (HMI), such as a portable operator terminal, for monitoring and controlling industrial processes involving spatially distributed control systems in a manufacturing plant. The terminal includes an output indicating to human operators a portion of the control program associated with a given machine, and an input device for putting in operating data. Furthermore, the operator of the

portable terminal may be identified by an identifying code. This portable operator terminal delivers a position signal to a central control processor of the plant. This central processor 12 incorporates the control program and includes the relevant input and output data (I/O data) of the control system. Based on the position signals, the terminal (HMI) receives only those data from the central processor which are relevant to the machine which are presently close-by. As the operator of the portable HMI moves through the plant, the position signal changes, which changes the data and programs produced by the HMI. In other words, the operating programs of the HMI change with its position. In particular, the automatic transmission of the information regarding the closest machine to the portable HMI depends on its actual location. Inasmuch as the operator of the HMI is identified, there is a further step with respect to the kind of data available to the portable HMI. This system provides a convenient tool for troubleshooting and finding faulty machines in a manufacturing plant comprising a plurality of machines.

In contrast thereto, the object of applicants' claimed method and control and/or monitoring unit is to provide an absolutely error-free connection of a mobile, electronic control and/or monitoring unit to at least one machine or at least one machine component in a group of such components to be controlled and/or monitored, for example robots. The error-free connection is very comfortable and simple for the operator to handle. In

this respect, it is important for the link or log-on connection to the respective machine or machine component to be effected after a simple, active acceptance/acknowledgment of the potential connection by an operating element on the control and/or monitoring unit, as has been set forth in amended claims 26 and 36.

This arrangement has the advantage that, on the one hand, the operation is very user-friendly and, on the other hand, the connection or log-one of the mobile, electronic control and/or monitoring unit to a machine or machine component can be effected only by the user, which prevents unwanted connections. Since the mobile, electronic control and/or monitoring unit is directly accessible to the user, the connection may be made instantaneously and comfortably without the user having to change location, as has been pointed out in the paragraph bridging pages 5 and 6.

As has been pointed out on page 9 of the specification, a potential connection or log-one of the mobile, electronic control and/or monitoring unit to a machine or machine component is consciously initiated by the user, which prevents undesirable communication links from being established. In particular, it is prevented that suddenly another but the intended machine or machine part is connected when the user inadvertently changes location. According to the invention, a potential connection

between a hand-held electronic device and a controllable machine or machine part selected from a plurality of such machines or machine parts is readily and securely obtainable.

This quasi-manual selection is clear for the user and may be effected almost intuitively. There is little chance of error and the operation is very user-friendly so that damage or injuries may be readily prevented.

Nothing like this being suggested by the prior art, claims 26 and 36, together with the claims dependent thereon, are believed to be clearly patentable. The combination set forth in these claims has the surprising effects outlined hereinabove, and is not suggested by individual features found in other combinations in the prior art.

Nishikawa et al, submitted by applicants with their originally filed Information Disclosure Statement, merely reflects the general state of the art. The patent deals with a method for controlling the travel of a plurality of mobile robots. In the disclosed method, the control station directs one of a plurality of mobile robots to the destination robot, responding to the direction, searches the route to the destination directed by the control station and sends the result to the control station. The control station which receives this information checks if the travel path searched by the mobile

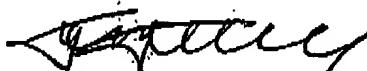
robot is already reserved by other mobile robots or not by the reservation table. If not, the control station informs the reserve completion to said mobile robot. The mobile robot which received the information of the reservation completion travels automatically along the travel path which is already reserved. In addition, said control station, when there are other mobile robots which disturb the travel of each mobile robot, directs the robot to wait or to take an alternate route according to the situation, or directs other mobile robots that disturb the travel to halt.

This system prevents a plurality of mobile robots to collide with each other when they move. However, there is no suggestion in this system of providing an error-free operative connection between two electronic or electro-mechanical units, as provided by applicants. In other words, Nishikawa et al do not provide a system which enables a potential connection between a mobile, electronic control and/or monitoring unit to a machine or machine component. The particular references to specific parts of the Nishikawa et al method are torn by the Examiner from the context of the entire disclosed method, which has nothing to do with that disclosed and claimed by applicants. The core of the claimed subject matter, which is produced by the claimed combination of specific parts combined in a specific manner is not suggested by Nishikawa et al.

A petition for a three-months extension is attached hereto.

Favorable reconsideration and allowance of claims 26-30, 34-47, 49 and 50 are respectfully solicited.

Respectfully submitted,
DIETER GRAIGER ET AL.-1



COLLARD & ROE, P.C.
1077 Northern Boulevard
Roslyn, New York 11576
(516) 365-9802

Kurt Kelman, Reg.No.18,628
Allison C. Collard, Reg.No.22,532
Edward R. Freedman, Reg.No.26,048
Attorneys for Applicant

KK:jc

Enclosure: Exhibit A

Copy of Petition for 3-month Extension of Time
(Large Entity)
PTO-1449 form
U.S. Patent No. 6,167,464

CERTIFICATE OF FACSIMILE TRANSMISSION

Fax No. 703-872-9318

I hereby certify that this correspondence is being sent by facsimile-transmission to the Assistant Commissioner for Patents, Washington, D.C. 20231, on March 14, 2003.


Kurt Kelman

EXHIBIT AMarked-up Copy of Prior Pending
Paragraphs Showing the Changes Made

Change the paragraph bridging pages 5 and 6 to read as follows:

--The connection between the control and/or monitoring unit and the respective machine to be controlled and/or observed is effected automatically on entering the functional or operating range of the transmitter and/or receiver or simply by actively accepting/acknowledging [cancelling] the potential connection, [or automatically when the selected connection becomes available or by actively cancelling the potential link or connection,] which firstly makes for very easy operation and secondly means that a link or connection can only be made consciously by the user, thereby preventing undesirable connections.--

EXHIBIT BMarked-up Copy of Prior Pending
Claims 26 and 36 Showing the Changes Made

26. (Amended) A method of connecting a mobile, electronic control and/or monitoring unit to at least one machine or at least one machine component in a group or a plurality of machines or machine components to be controlled and/or monitored, for example robots, characterised in that during a connection or log-on procedure between the control and/or monitoring unit and the respective machine or a distant point on the machine, a clear link or log-on connection is set up by means of interfaces to the selected, wireless direction-finder of the corresponding distant point or by means of transmitters and/or receivers tuned to the transmission range or reception range, having a limited, localised functional or operating range and, once the connection has been acknowledged and established, the programmed control and/or monitoring of the machine or the machine component is managed via another, standard data transmission means, for example a hard-wired network and/or via a wireless link between the control and/or monitoring unit and the selected machine or selected machine component, the connection being managed simply by actively accepting/acknowledging the potential connection by means of an operating element on the control and/or monitoring unit. LAB.

36. (Amended) A control and/or monitoring unit having an input device with several operating elements and/or an optical display and having at least one interface to at least one control unit for one or more machines or machine components, for example robots, in particular for applying a method as claimed in claim 26, characterised in that another interface for a wireless connection system to a co-operating distant point in or on the machine to be controlled and/or monitored ensures that a clear and selective connection or link can be established with or on

the control and/or monitoring unit to one or more machines or machine components to be monitored, and an operating element is provided on the input device for selectively establishing and/or terminating the connection.